

> d his

(FILE 'HOME' ENTERED AT 16:44:59 ON 30 OCT 2006)

FILE 'REGISTRY' ENTERED AT 16:46:16 ON 30 OCT 2006

L1	STRUCTURE UPLOADED
L2	1 S L1 SSS SAM
L3	2 S L1 SSS FULL
L4	STRUCTURE UPLOADED
L5	4 S L4 SSS SAM
L6	35 S L4 SSS FULL
L7	STRUCTURE UPLOADED
L8	4 S L7 SSS SAM
L9	36 S L7 SSS FULL
L10	STRUCTURE UPLOADED
L11	1 S L10 SSS SAM
L12	5 S L10 SSS FULL

FILE 'CAPLUS, MEDLINE' ENTERED AT 16:53:44 ON 30 OCT 2006

L13	58 S L6
L14	45 DUP REM L13 (13 DUPLICATES REMOVED)
L15	58 S L9
L16	13 S L15 NOT L14
L17	13 DUP REM L16 (0 DUPLICATES REMOVED)
L18	0 S L15 NOT L13
L19	3 S L12

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L8	4 S L7 SSS SAM
L9	36 S L7 SSS FULL
L10	STRUCTURE UPLOADED
L11	1 S L10 SSS SAM
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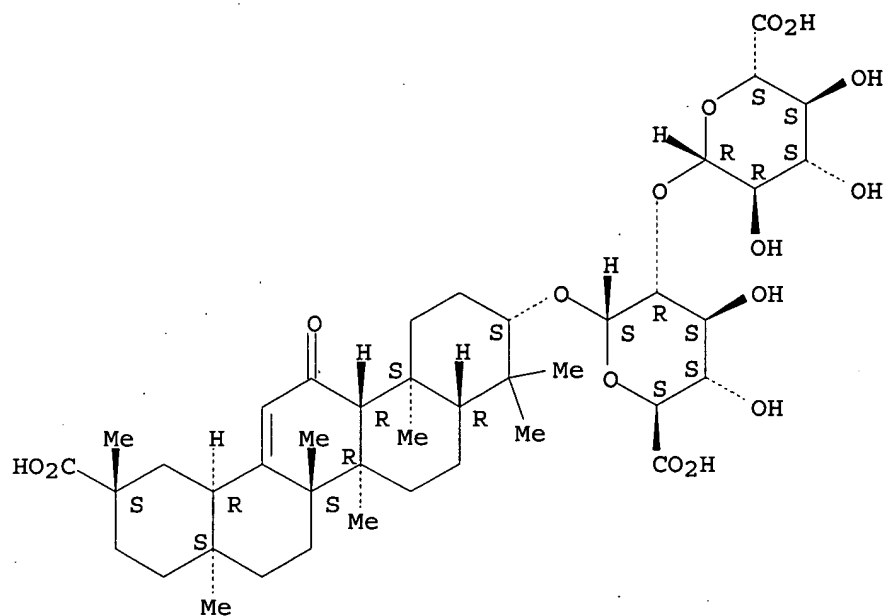
L1	STRUCTURE UPLOADED
L2	1 S L1 SSS SAM
L3	2 S L1 SSS FULL
L4	STRUCTURE UPLOADED
L5	4 S L4 SSS SAM
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L9	36 S L7 SSS FULL
L10	STRUCTURE UPLOADED
L11	1 S L10 SSS SAM
L12	5 S L10 SSS FULL

FILE 'CAPLUS, MEDLINE' ENTERED AT 16:53:44 ON 30 OCT 2006

L13	58 S L6
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L16	13 S L15 NOT L14
L17	13 DUP REM L16 (0 DUPLICATES REMOVED)
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L1 1 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN α -D-Glucopyranosiduronic acid, (3 β ,20 β)-20-carboxy-11-oxo-
30-norolean-12-en-3-yl 2-O- β -D-glucopyranuronosyl- (9CI)
MF C42 H62 O16
CI COM

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:499243 CAPLUS

DOCUMENT NUMBER: 139:374307

TITLE: Mechanism of action of glycyrrhizic acid in inhibition of Epstein-Barr virus replication in vitro

AUTHOR(S): Lin, Jung-Chung

CORPORATE SOURCE: College of Medicine, Department of Microbiology, Tzu Chi University, Hualien, 970, Taiwan

SOURCE: Antiviral Research (2003), 59(1), 41-47

CODEN: ARSRDR; ISSN: 0166-3542

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors report here that glycyrrhizic acid (GL), a component of licorice root (*Glycyrrhiza radix*), is active against EBV replication in superinfected Raji cells in a dose-dependent fashion. The IC50 values for viral inhibition and cell growth were 0.04 and 4.8 mM, resp. The selectivity index (ratio of IC50 for cell growth to IC50 for viral DNA synthesis) was 120. Time of addition expts. suggested that GL interferes with an early step of the EBV replication cycle (possibly penetration). GL had no effect on viral adsorption nor did it inactivate EBV particles. Thus, GL represents a new class of anti-EBV compds. with a mode of action different from that of the nucleoside analogs that inhibit viral DNA polymerase.

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:763541 CAPLUS

DOCUMENT NUMBER: 130:172862

TITLE: Epstein-Barr virus DNA polymerase inhibitors from Chinese herbs: use of preliminary screening, physicochemical properties and taxonomy for new lead compounds generation

AUTHOR(S): Lien, Eric J.; Bui, Huynh-Hoa; Ren, Shijun; Liu, Karin C. S. Chen; Lin, Mei-Tsu; Chiou, Juo-Farn

CORPORATE SOURCE: Department of Pharmaceutical Sciences, School of Pharmacy, University of Southern California, Los Angeles, CA, 90033, USA

SOURCE: Chinese Pharmaceutical Journal (Taipei). (1998), 50(4), 233-247

CODEN: CPHJEP; ISSN: 1016-1015

PUBLISHER: Pharmaceutical Society of Republic of China

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A paradigm of combining preliminary screening data, SAR, functional group and taxonomical analyses has been proposed for new lead compds. generation. Based on the screening data of 38 natural products, a quaternary ammonium derivative (coptisine chloride), a sesquiterpene with an α,β -unsatd. lactone function and an isoflavonoid (daidzein) have been found to be most active. Based on the analyses of overall structures, physicochem. properties and taxonomical relationships, 47 related compds. and six families of plants are suggested for further investigation. Due to the inherent biodiversity, nature may still be the best source for new drug discovery.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1983:401608 CAPLUS

DOCUMENT NUMBER: 99:1608

TITLE: Inhibition of 12-O-tetradecanoylphorbol-13-acetate-

AB Numerous viruses cause latent infections in humans, and reactivation often results in pain and suffering. While vaccines for several of these viruses are available or currently being studied in clinical trials, and antiviral therapies have been successful in preventing or treating active infection, therapy to eradicate latent infection has lagged behind. A new study reported in this issue of the JCI shows that treatment of cells latently infected with Kaposi sarcoma-associated herpesvirus (KSHV) with glycyrrhizic acid, a component of licorice, reduces synthesis of a viral latency protein and induces apoptosis of infected cells. This finding suggests a novel way to interrupt latency.

L3 ANSWER 5 OF 6 MEDLINE on STN
ACCESSION NUMBER: 2003306618 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12834859
TITLE: Mechanism of action of glycyrrhizic acid in inhibition of Epstein-Barr virus replication in vitro.
AUTHOR: Lin Jung Chung
CORPORATE SOURCE: Department of Microbiology, College of Medicine, Tzu Chi University, 701 Section 3, Chung Yang Road, Hualien 970, Taiwan ROC.. jxl8@mail.tcu.edu.tw
SOURCE: Antiviral research, (2003 Jun) Vol. 59, No. 1, pp. 41-7. Journal code: 8109699. ISSN: 0166-3542.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200310
ENTRY DATE: Entered STN: 2 Jul 2003
Last Updated on STN: 24 Oct 2003
Entered Medline: 23 Oct 2003

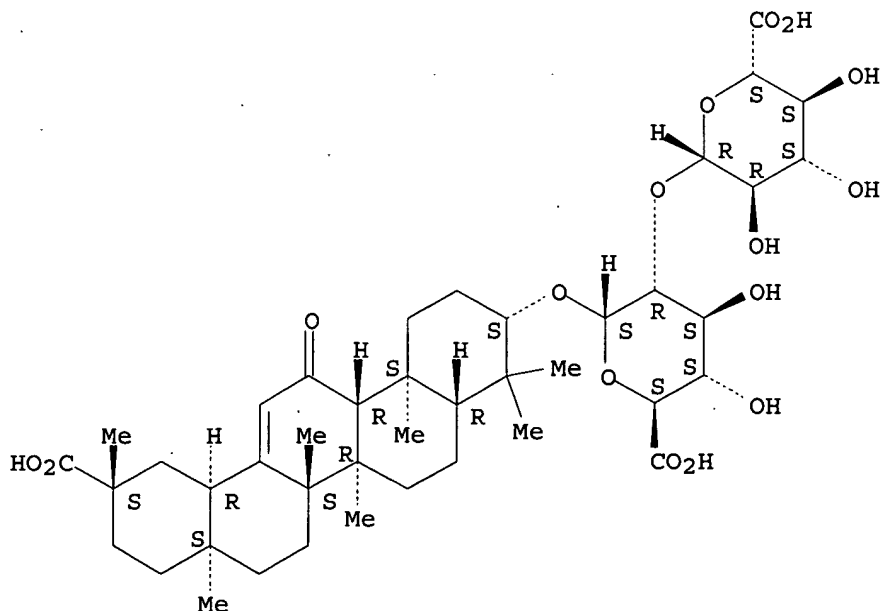
AB We report here that glycyrrhizic acid (GL), a component of licorice root (Glycyrrhiza radix), is active against EBV replication in superinfected Raji cells in a dose-dependent fashion. The IC(50) values for viral inhibition and cell growth were 0.04 and 4.8mM, respectively. The selectivity index (ratio of IC(50) for cell growth to IC(50) for viral DNA synthesis) was 120. Time of addition experiments suggested that GL interferes with an early step of EBV replication cycle (possibly penetration). GL had no effect on viral adsorption, nor did it inactivate EBV particles. Thus, GL represents a new class of anti-EBV compounds with a mode of action different from that of the nucleoside analogs that inhibit viral DNA polymerase.

L3 ANSWER 6 OF 6 MEDLINE on STN
ACCESSION NUMBER: 96186542 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8606838
TITLE: The reversal of Epstein Barr virus induced hepatosplenomegaly in 24 hours with inhibitors of xanthine oxidase and nitric oxide synthase.
AUTHOR: Flavin-Koenig D F
SOURCE: The New Zealand medical journal, (1996 Mar 22) Vol. 109, No. 1018, pp. 106-7. Journal code: 0401067. ISSN: 0028-8446.
PUB. COUNTRY: New Zealand
DOCUMENT TYPE: (CASE REPORTS)
Letter
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199605
ENTRY DATE: Entered STN: 31 May 1996
Last Updated on STN: 6 Feb 1998
Entered Medline: 17 May 1996

=> d 13 1-6 ibib abs hitstr

L3 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:499243 CAPLUS
 DOCUMENT NUMBER: 139:374307
 TITLE: Mechanism of action of glycyrrhizic acid in inhibition of Epstein-Barr virus replication in vitro
 AUTHOR(S): Lin, Jung-Chung
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 PUBLISHER: Elsevier Science B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The authors report here that glycyrrhizic acid (GL), a component of licorice root (*Glycyrrhiza radix*), is active against EBV replication in superinfected Raji cells in a dose-dependent fashion. The IC₅₀ values for viral inhibition and cell growth were 0.04 and 4.8 mM, resp. The selectivity index (ratio of IC₅₀ for cell growth to IC₅₀ for viral DNA synthesis) was 120. Time of addition expts. suggested that GL interferes with an early step of the EBV replication cycle (possibly penetration). GL had no effect on viral adsorption nor did it inactivate EBV particles. Thus, GL represents a new class of anti-EBV compds. with a mode of action different from that of the nucleoside analogs that inhibit viral DNA polymerase.
 IT 1405-86-3, Glycyrrhizic acid
 RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (mechanism of glycyrrhizic acid in inhibition of Epstein-Barr virus replication in vitro)
 RN 1405-86-3 CAPLUS
 CN α -D-Glucopyranosiduronic acid, (3 β ,20 β)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O- β -D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:763541 CAPLUS

DOCUMENT NUMBER: 130:172862

TITLE: Epstein-Barr virus DNA polymerase inhibitors from Chinese herbs: use of preliminary screening, physicochemical properties and taxonomy for new lead compounds generation

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CORPORATE SOURCE: Department of Pharmaceutical Sciences, School of Pharmacy, University of Southern California, Los Angeles, CA, 90033, USA

SOURCE: Chinese Pharmaceutical Journal (Taipei) (1998), 50(4), 233-247

CODEN: CPHJEP; ISSN: 1016-1015

PUBLISHER: Pharmaceutical Society of Republic of China

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A paradigm of combining preliminary screening data, SAR, functional group and taxonomical analyses has been proposed for new lead compds. generation. Based on the screening data of 38 natural products, a quaternary ammonium derivative (coptisine chloride), a sesquiterpene with an α,β -unsatd. lactone function and an isoflavonoid (daidzein) have been found to be most active. Based on the analyses of overall structures, physicochem. properties and taxonomical relationships, 47 related compds. and six families of plants are suggested for further investigation. Due to the inherent biodiversity, nature may still be the best source for new drug discovery.

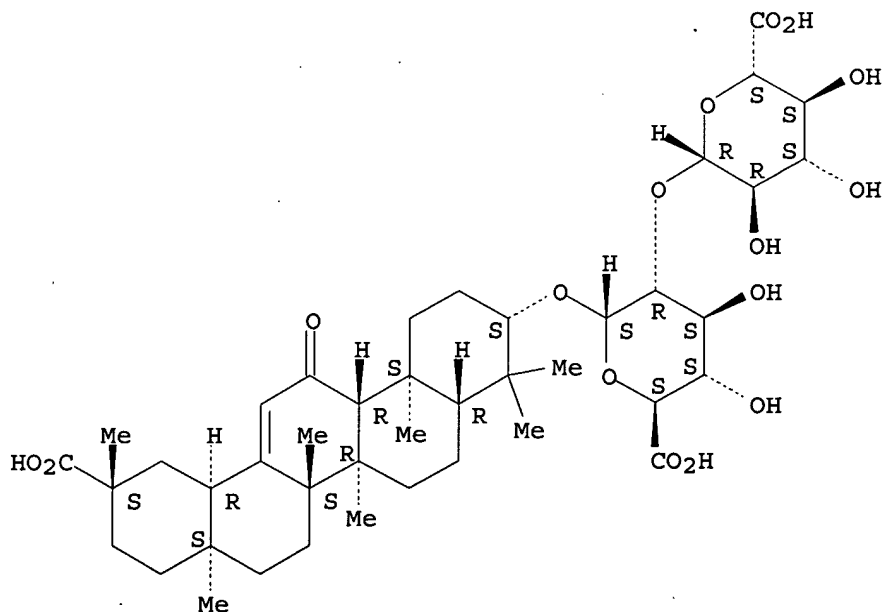
IT 1405-86-3, Glycyrrhizic acid

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(Epstein-Barr virus DNA polymerase inhibitors from Chinese herbs)

RN 1405-86-3 CAPLUS

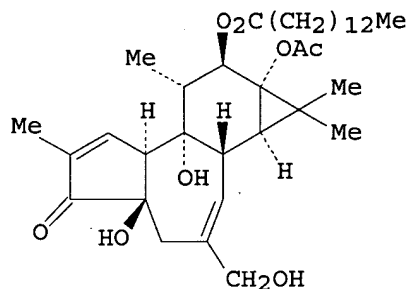
CN α -D-Glucopyranosiduronic acid, (3 β ,20 β)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O- β -D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1983:401608 CAPLUS
DOCUMENT NUMBER: 99:1608
TITLE: Inhibition of 12-O-tetradecanoylphorbol-13-acetate-induced induction in Epstein-Barr virus early antigen in Raji cells
AUTHOR(S): Okamoto, Hitoshi; Yoshida, Daisuke; Mizusaki, Shigenobu
CORPORATE SOURCE: Cent. Res. Inst., Japan Tob. and Salt Public Corp., Yokohama, 227, Japan
SOURCE: Cancer Letters (Shannon, Ireland) (1983), 19(1), 47-53
CODEN: CALEDQ; ISSN: 0304-3835
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

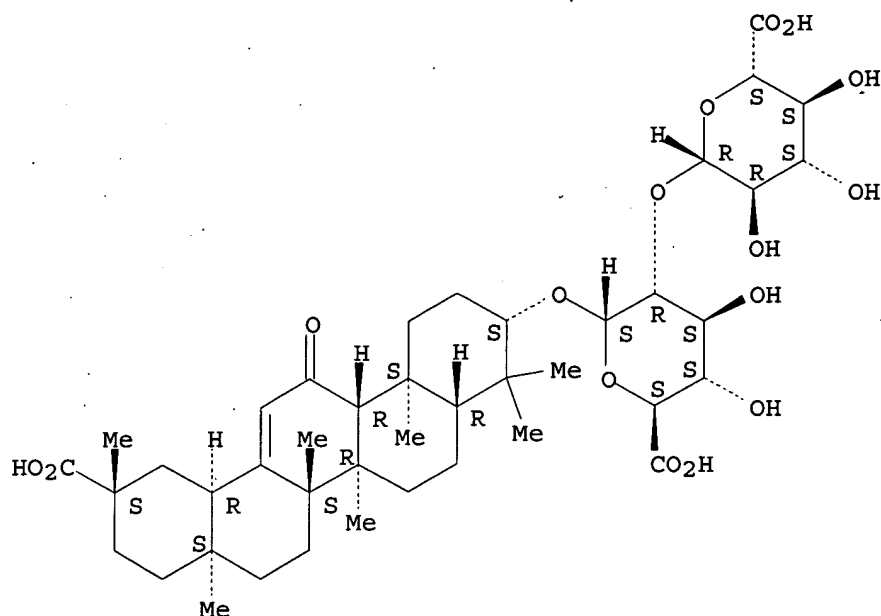


AB Retinol [68-26-8], 5 flavonoids, 3 steroids, and 7 sweetening agents were studied for their effects on TPA (I) [16561-29-8]-induced early antigen (EA) of Epstein-Barr virus (EBV) in Raji cells. Concomitant treatment of Raji cells with TPA and retinol inhibited EA induction. Among flavonoids, quercetin [117-39-5] resulted in effective inhibition of EA induction by TPA and α -naphthoflavone [604-59-1] showed a weakly inhibitory effect. None of the other flavonoids such as rutin [153-18-4], catechin [154-23-4] and β -naphthoflavone [6051-87-2] affected the induction of EBV-EA by TPA. β -Estradiol [50-28-2] obviously inhibited EBV-EA induction by TPA, but hydrocortisone [50-23-7] did not show any inhibitory effect. Glycyrrhetic acid, steviol, phyllostulcin and perrillartine also strongly inhibited EBV-EA induction. Glycyrrhizin [1405-86-3] and stevioside [57817-89-7], glycosides of glycyrrhetic acid [471-53-4] and steviol [471-80-7], did not inhibit the induction of EBV-EA by TPA. Some of these inhibitors may be effective in inhibiting the in vivo tumor promotion by TPA.

IT 1405-86-3
RL: BIOL (Biological study)
(TPA-induced Epstein-Barr virus early antigen in Raji cells response to)

RN 1405-86-3 CAPLUS
CN α -D-Glucopyranosiduronic acid, (3 β ,20 β)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O- β -D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 4 OF 6 MEDLINE on STN
 ACCESSION NUMBER: 2005132955 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 15765143
 TITLE: Licking latency with licorice.
 AUTHOR: Cohen Jeffrey I
 CORPORATE SOURCE: Medical Virology Section, Laboratory of Clinical Infectious Diseases, NIH, Bethesda, Maryland 20892, USA..
 jcohen@niaid.nih.gov
 SOURCE: The Journal of clinical investigation, (2005 Mar) Vol. 115, No. 3, pp. 591-3.
 Journal code: 7802877. ISSN: 0021-9738.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: Commentary
 Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
 ENTRY MONTH: 200505
 ENTRY DATE: Entered STN: 15 Mar 2005
 Last Updated on STN: 10 May 2005
 Entered Medline: 9 May 2005

AB Numerous viruses cause latent infections in humans, and reactivation often results in pain and suffering. While vaccines for several of these viruses are available or currently being studied in clinical trials, and antiviral therapies have been successful in preventing or treating active infection, therapy to eradicate latent infection has lagged behind. A new study reported in this issue of the JCI shows that treatment of cells latently infected with Kaposi sarcoma-associated herpesvirus (KSHV) with glycyrrhizic acid, a component of licorice, reduces synthesis of a viral latency protein and induces apoptosis of infected cells. This finding suggests a novel way to interrupt latency.

L3 ANSWER 5 OF 6 MEDLINE on STN
 ACCESSION NUMBER: 2003306618 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 12834859
 TITLE: Mechanism of action of glycyrrhizic acid in inhibition of Epstein-Barr virus replication in vitro.
 AUTHOR: Lin Jung Chung
 CORPORATE SOURCE: Department of Microbiology, College of Medicine, Tzu Chi University, 701 Section 3, Chung Yang Road, Hualien 970,

SOURCE: Taiwan ROC.. jx18@mail.tcu.edu.tw
Antiviral research, (2003 Jun) Vol. 59, No. 1, pp. 41-7.
Journal code: 8109699. ISSN: 0166-3542.

PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200310
ENTRY DATE: Entered STN: 2 Jul 2003
Last Updated on STN: 24 Oct 2003
Entered Medline: 23 Oct 2003

AB We report here that glycyrrhizic acid (GL), a component of licorice root (Glycyrrhiza radix), is active against EBV replication in superinfected Raji cells in a dose-dependent fashion. The IC(50) values for viral inhibition and cell growth were 0.04 and 4.8mM, respectively. The selectivity index (ratio of IC(50) for cell growth to IC(50) for viral DNA synthesis) was 120. Time of addition experiments suggested that GL interferes with an early step of EBV replication cycle (possibly penetration). GL had no effect on viral adsorption, nor did it inactivate EBV particles. Thus, GL represents a new class of anti-EBV compounds with a mode of action different from that of the nucleoside analogs that inhibit viral DNA polymerase.

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DOCUMENT NUMBER: PubMed ID: 8606838
TITLE: The reversal of Epstein Barr virus induced hepatosplenomegaly in 24 hours with inhibitors of xanthine oxidase and nitric oxide synthase.
AUTHOR: Flavien-Koenig D F
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